DEPARTMENT OF PUBLIC WORKS

(13)

COUNTY OF MAUI

Adoption of Chapter 201
Street Lighting Standards

SUMMARY

Chapter 201, entitled "Street Lighting Standards", is adopted.

TITLE MC-15

DEPARTMENT OF PUBLIC WORKS

SUBTITLE 02

STREET LIGHTING STANDARDS

CHAPTER 201

STREET LIGHTING STANDARDS

Subchapter 1 General Provisions

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SUBCHAPTER 1

GENERAL PROVISIONS

- §15-201-1 <u>Title.</u> The rules in this chapter shall be known as the "Street Lighting Standards". [Eff 3/23/00; am and comp 01/27/18] (Auth: HRS §§46-1.5(13), (16)) (Imp: MCC §18.20.060)
- §15-201-2 <u>Authority</u>. The rules herein are established pursuant to sections 46-1.5(13) and 46-1.5(16) of the Hawaii Revised Statutes. [Eff 3/23/00; am and comp 01/27/18] (Auth: HRS §§46-1.5(13), (16)) (Imp: MCC §18.20.060)
- §15-201-3 <u>Purpose</u>. These rules provide standards for outdoor lighting that, while providing a level of safety for vehicular and pedestrian traffic, do not excessively interfere with nighttime viewing and avoid glare and light trespass onto private property. These rules also encourage the conservation of electricity. [Eff 3/23/00; am and comp 01/27/18] (Auth: HRS §§46-1.5(13), (16)) (Imp: MCC §18.20.060)
- §15-201-4 Construction. These rules should be read in conjunction with the provisions of Hawaii Revised Statutes, the revised charter of the County of Maui (1983), as amended, and the Maui County Code. In any conflict between the general provisions herein and any other provision, the more restrictive provision shall govern. [Eff 3/23/00; am and comp 01/27/18] (Auth: HRS §§46-1.5(13), (16)) (Imp: MCC §18.20.060)
- §15-201-5 <u>Definitions</u>. For the purpose of these rules, unless it is plainly evident from the context that a different meaning is intended, certain words and phrases used herein are defined as follows:

"Agricultural" means areas designated agricultural by the State land use

commission and/or zoned agricultural via County ordinance.

"Blue light power content" means the International Dark Sky Association's (IDA) definition of blue light content or the sum of energy between 405-530nm divided by the sum of energy from 380-730nm times the total power output in watts. The blue light power content for HPS is 10w for 100w HPS bulb, 15w for a 150w HPS bulb, and 25w for a 250w HPS bulb.

"CCT" is correlated color temperature expressed in degree Kelvin (K).

"Director" means the director of the department of public works of the

County of Maui, or a duly authorized designee.

"Fully shielded" means that the outdoor light fixture is constructed so that all of the light emitted by the fixture is projected below the horizontal plane of the lowest point of the fixture.

"Glare" means the sensation produced by luminance within the visual field that is sufficiently greater than the luminance to which the eyes are adapted to cause annoyance, discomfort, or loss in visual performance and visibility.

"LED" means light emitting diode.

"Light trespass" is any form of artificial illumination emanating from a

luminaire that penetrates other property other than its intended use.

"Luminaire" means the complete lighting assembly, less the support assembly.

"Partially shielded" means that the outdoor lighting fixture is constructed so that at least ninety percent of the light emitted by the fixture is projected below the horizontal place of the lowest point of the fixture.

"Rural" means areas designated rural by the State land use commission

and/or zoned rural by County ordinance.

"S/P ratio" means the proportion of scotopic to photopic output.

"Urban" means areas designated urban by the State land use commission. [Eff 3/23/00; am and comp 01/27/18] (Auth: HRS §§46-1.5(13), (16)) (Imp: MCC §18.20.060)

§15-201-6 <u>Lamp standards</u>. (a) High pressure sodium or LED lamps or other fixtures approved by the director shall be the only allowed lamp on public and/or private right-of-ways; however, existing lamps other than high pressure sodium or LED lamps shall remain until they expire at which time they shall be replaced.

(b) LED lamps shall meet the following requirements:

i) CCT of less than 3000k.

ii) S/P ratio <1.2.

iii) Blue light power content less than the corresponding blue light power content for HPS.

iv) Adaptive controls to allow for dimming.

(c) For roadways within the rural or agricultural areas, the maximum allowable wattage shall be 100W HPS (or equivalent LED wattage) for internal road intersections and 150W HPS (or equivalent LED wattage) for intersections

from a project with a major and/or minor collector road.

- (d) For roadways within the urban areas, the maximum allowable wattage shall be 150W HPS (or equivalent LED wattage) for internal road intersections and 250W HPS (or equivalent LED wattage) at intersections with a major or minor collector road. [Eff 3/23/00; am and comp 01/27/18] (Auth: HRS §§46-1.5(13), (16)) (Imp: MCC §18.20.060)
- §15-201-7 <u>Luminaire standards.</u> Fully shielded luminaires shall be the only allowed fixture on public and/or private right-of-ways. [Eff 3/23/00; am and comp 01/27/18] (Auth: HRS §§46-1.5(13), (16)) (Imp: MCC §18.20.060)

§15-201-8 <u>Light standards (poles)</u>. (a) Free standing aluminum light standards and aluminum arms shall continue to be stocked and used for existing

lighting within major collector roadways.

(b) Any new subdivision or project that requires street lighting within public roadways, shall use light standards that are non-reflective, such as anodized bronze or any other light standard accepted by the director. Any unusual or project specific requests for non-standard lighting standards shall be reviewed and approved by the director after consultation with the utilities, the public works commission, and applicant.

(c) The maximum height of the light standard, measured from ground level directly below the luminaire to the bottom of the lamp itself, shall be twenty feet. Also, light standards are only required at intersecting streets. Any variation to this height standard will be reviewed and approved by the director after

consultation with the public works commission.

(d) Any unusual or project specific requests for non-standard lighting standards shall be reviewed and approved by the director after consultation with the utilities, the public works commission, and applicant. [Eff 3/23/00; am and comp 01/27/18] (Auth: HRS §§46-1.5(13), (16)) (Imp: MCC §18.20.060)

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§15-201-9 <u>Installation</u>, <u>illumination</u>, <u>removal</u>, <u>and alteration</u> guidelines. (a) The department may install, illuminate, remove, or alter street lights for:

(1) Locations where the nighttime accident rate exceeds those of the

daylight hours.

(2) Intersections, urban or rural, taking into consideration the layout of the intersection, traffic volumes, location of the intersection, concentration of pedestrians, roadside interferences and that channelized intersections and the roadway width may require more lighting.

(3) Any significant change of the roadway alignment, long bridges, tunnels, or any structures that may be hazardous, such as curbs,

piers, abutments, or culverts.

(4) Locations along the highway where police reports show crimes are committed, such as theft, rape, and bodily harm cases.

(5) Locations of a highway where traffic turning movements to and from

roadside developments threaten public safety.

(6) Subdivision streets, provided that the street has been dedicated to the County and at least fifty percent of the lots on the street are occupied.

(b) Street lights not needed shall be removed. [Eff 3/23/00; am and comp 01/27/18] (Auth: HRS §§46-1.5(13), (16), MCC §12.17.030) (Imp: MCC §12.00.060)

§18.20.060)

§15-201-10 Severability. If any portion of the foregoing rules or the applicability thereof to any person, property or circumstance is held invalid for any reason, that invalidity shall not affect other provisions or applications which can be given effect without the invalid provision or application, and to this end these are declared to be severable. [Eff 3/23/00; am and comp 01/27/18] (Auth: HRS §§46-1.5(13), (16)) (Imp: MCC §18.20.060)

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ADOPTE	D this 20th	day of November , 2017 , at Wailuku,
Maui, Hawaii.	1	
		DEPARTMENT OF PUBLIC WORKS
		DAVID C. GOODE Director
		ALAN M. ARAKAWA Mayor, County of Maui KEITH A. REGAN ACTING MAYOR, COUNTY OF MAUI
		Approved this 1274 day of 2018.
APPROVED AS TO FO AND LEGALITY:	ORM	
MICHAEL J. HOPPER		
Deputy Corporation (County of Maui		

Received this 17th day of

, 20<u>18</u>.

January

DANNY A. MATEO County Clerk
County of Maui

CERTIFICATION

- I, DAVID C. GOODE, Director, Department of Public Works, County of Maui, do hereby certify:
- 1. That the foregoing is a copy of the amendments to the Rules Pertaining to Street Lighting Standards for the County of Maui, drafted in Ramseyer format, pursuant to the requirements [to] of Section 91-4.1, Hawaii Revised [Statues,] Statutes, which were adopted on the 20th day of November ______, 2017, following a public hearing on November 20, 2017, and filed with the Office of the County Clerk.
- 2. That the notice of public hearing on the foregoing amendments to the rules was published in The Maui News on the 19^{th} day of October, 2017.

DAVID C. GOODE, Director Department of Public Works

2017-0955 2017-12-07 Amd to Title 15